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I, LEANNE MYNOTT, MANAGER EXAMINATION SUPPORT AND SALES hereby certify that annexed is a true copy of the Provisional specification in connection with Application No. 2003905792 for a patent by PALTRONICS AUSTRALASIA PTY LIMITED as filed on 21 October 2003.

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Twenty-eighth day of July 2004

LEANNE MYNOTT
MANAGER EXAMINATION SUPPORT AND SALES

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AUSTRALIA

PATENTS ACT 1990

PROVISIONAL SPECIFICATION

FOR THE INVENTION ENTITLED:-

"An Apparatus and Method for Allocating a Prize"

The invention is described in the following statement:-

Field of Invention

The present invention relates to an apparatus and method for allocating a prize.

The invention has been developed primarily for use with a plurality of interlinked gaming terminals in one or more gaming establishments and will be described hereinafter predominantly with reference to this application. However, the invention is not limited to that particular field of use and is also suitable for use with online gaming, lotto, pools, lotteries, art unions, bingo, raffles and other games involving one or more wagers being placed upon an outcome having a finite probability of occurring. Additionally, the invention is applicable to any type of electronic transaction, such as those processed by electronic cash registers and those that may be entered into on a personal computer via the internet, for example.

Background

It is known to "link" gaming terminals to provide a number of additional functionalities. This includes the ability to control the awarding of a prize, as the pool of available funds is greater and the amount of funds available is known rather than having to be estimated. Another functionality of interlinked gaming terminals is that secondary gaming is possible. For example, for a given group of interlinked gaming terminals, a central display provides the gamers with a visual indication of a presently available jackpot prize that is being incrementally increased as the gamers operate the interlinked gaming terminals. It is known by the gamers that the prize will be awarded when it is incremented to a randomly selected value that is less than a predefined value. Typically, the predefined value will also be visually indicated to the gamers by the display.

The use of such functionality is intended to provide additional impetus to the gamers to play the terminals and thereby win the jackpot prize in addition to any prize available to be awarded by the respective terminal. However, prior art implementations of such inter-linked terminals typically require high bandwidth communications because of the large amount of data communicated between the various gaming terminals and a primary controller. Additional problems may

be encountered in prior art systems due to the requirement for the primary controller to analyse the large amount of data collected from the gaming terminals in the short periods of time typically available between subsequent games.

The discussion of the prior art within this specification is to assist the addressee understand the invention and is not an admission of the extent of the common general knowledge in the field of the invention and is included without prejudice.

Summary of the Invention

It is an object of the present invention to overcome or ameliorate at least one of the disadvantages of the prior art, or to provide a useful alternative.

According to a first aspect of the present invention there is provided a method of allocating a prize using a gaming apparatus, wherein said apparatus includes:

a primary controller for determining the award of a prize; and

an auxiliary controller capable of communication with said primary controller, said auxiliary controller being further capable of communication with one or more gaming terminals;

said method including the steps of:

a) receipt by the auxiliary controller of data from one or more of the gaming terminals, said data including one or more gaming terminal identifier and associated gaming terminal accumulated amount;

b) storage of said data in a memory accessible to said auxiliary controller;

c) calculation by said auxiliary controller of a total accumulated amount;

d) communication from said auxiliary controller to the primary controller of the total accumulated amount;

e) determination by the primary controller of whether or not to award a prize based at least in part upon said total accumulated amount;

f) if the determination in step e) is positive, communication from the primary controller to the auxiliary controller of data associated with said determination; and

g) analysis by the auxiliary controller of the data associated with said determination and the data stored in said memory to determine to which of the gaming terminals the prize is to be allocated.

In one preferred embodiment the data associated with the determination is a portion of the total accumulated amount. In another preferred embodiment the data associated with the determination is any one of a proportion, fraction or percentage, which is preferably calculated by a comparison of a portion of the total accumulated amount and the total accumulated amount.

Preferably the auxiliary controller communicates with said primary controller via a wide area network having a bandwidth of less than or equal to 10,000 bits per second. More preferably, the auxiliary controller communicates with said gaming machines via a local area network having a bandwidth approximately equal to 10 mega bits per second. In another preferred embodiment the local area network includes a serial connection having a bandwidth of up to 115 kilobits per second.

In typical preferred embodiments the apparatus includes a plurality of auxiliary controllers each capable of communication with said primary controller and each capable of communication with a respective set of one or more gaming machines. Preferably the auxiliary controllers and said primary controller are geographically separate and each of said auxiliary controllers are disposed at separate venues. Such preferred embodiments typically include the following further step:

d1) communication from said auxiliary controller to the primary controller of an auxiliary controller identifier.

Preferably the data stored in the memory in step b) includes a list of gaming terminal identifiers and associated gaming terminal accumulated amounts in chronological order as received by the auxiliary controller.

In typical preferred embodiments a total accumulated amount is communicated to the primary controller once for each of a predefined polling

period, which is preferably at least 2 seconds and more preferably at least 1 second.

Some preferred embodiments perform the further step of:

h) communicating a win message from the auxiliary controller to the gaming terminal to which the prize is to be allocated.

Another preferable step is:

i) communicating a win message from the auxiliary controller to the primary controller.

Preferably the method may be performed in a period of time which is less than 5 seconds and more preferably less than 3 seconds.

According to a second aspect of the present invention there is provided an apparatus for allocating a prize including:

a primary controller, an auxiliary controller and a plurality of gaming terminals,

said auxiliary controller having first communication means for receipt of data from one or more of the gaming terminals, said data including one or more gaming terminal identifier and associated gaming terminal accumulated amount,

said auxiliary controller having a memory for storage of said data;

said auxiliary controller having a calculator for calculation of a total accumulated amount;

said auxiliary controller having second communication means for communication to the primary controller of the total accumulated amount;

said primary controller having a comparator for determination of whether or not to award a prize based at least in part upon said total accumulated amount;

said primary controller having access to said second communication means so as to communicate data associated with said determination to the auxiliary controller; and

said auxiliary controller being responsive to said data associated with said determination and the data stored in said memory so as to determine to which of the gaming terminals the prize is to be allocated.

Preferably the first communication means has a data communications baud rate which is higher than a data communications baud rate of the second

communication means. More preferably the first communication means is a local area network and the second communication means is a wide area network.

According to a third aspect of the present invention there is provided a method of allocating a prize in a gaming system having a primary controller, an auxiliary controller and a plurality of gaming terminals, said method including the steps of:

collating and storing data at said auxiliary controller indicative of accumulated amounts associated with one or more of the gaming terminals;

calculating a total accumulated amount at said auxiliary controller;

communicating said total accumulated amount to said primary controller;

using said primary controller to determine whether or not to award a prize and to determine data associated with said determination;

communicating said data associated with said determination to said auxiliary controller; and

using said auxiliary controller to determine to which of the gaming terminals the prize should be awarded.

According to a fourth aspect of the present invention there is provided a method of allocating a prize using an electronic apparatus, wherein said apparatus includes:

a primary controller for determining the award of a prize; and

an auxiliary controller capable of communication with said primary controller, said auxiliary controller being further capable of communication with one or more terminals;

said method including the steps of:

a) receipt by the auxiliary controller of data from one or more of the terminals, said data including one or more terminal identifier and associated terminal accumulated amount;

b) storage of said data in a memory accessible to said auxiliary controller;

c) calculation by said auxiliary controller of a total accumulated amount;

d) communication from said auxiliary controller to the primary controller of the total accumulated amount;

e) determination by the primary controller of whether or not to award a prize based at least in part upon said total accumulated amount;

f) if the determination in step e) is positive, communication from the primary controller to the auxiliary controller of data associated with said determination; and

g) analysis by the auxiliary controller of the data associated with said determination and the data stored in said memory to determine to which of the terminals the prize is to be allocated.

Preferably at least one of the terminals is a point of sale terminal and an accumulated amount associated with the point of sale terminal is representative of a dollar value of purchases at the point of sale terminal. In another preferred embodiment the accumulated amount associated with the point of sale terminal is representative of a number of products sold in transactions processed at the point of sale terminal.

According to a fifth aspect of the present invention there is provided an apparatus for allocating a prize including:

a primary controller, an auxiliary controller and a plurality of terminals,

said auxiliary controller having first communication means for receipt of data from one or more of the terminals, said data including one or more terminal identifier and associated terminal accumulated amount,

said auxiliary controller having a memory for storage of said data;

said auxiliary controller having a calculator for calculation of a total accumulated amount;

said auxiliary controller having second communication means for communication to the primary controller of the total accumulated amount;

said primary controller having a comparator for determination of whether or not to award a prize based at least in part upon said total accumulated amount;

said primary controller having access to said second communication means so as to communicate data associated with said determination to the auxiliary controller; and

said auxiliary controller being responsive to said data associated with said determination and the data stored in said memory so as to determine to which of the terminals the prize is to be allocated.

According to another aspect of the present invention there is provided a method of allocating a prize in a system having a primary controller, an auxiliary controller and a plurality of gaming terminals, said method including the steps of:

collating and storing data at said auxiliary controller indicative of accumulated amounts associated with one or more of the terminals;

calculating a total accumulated amount at said auxiliary controller;

communicating said total accumulated amount to said primary controller;

using said primary controller to determine whether or not to award a prize and to determine data associated with said determination;

communicating said data associated with said determination to said auxiliary controller; and

using said auxiliary controller to determine to which of the terminals the prize should be awarded.

Preferred embodiments of the invention will now be described, by way of example only, with reference to the accompanying drawings in which:

Figure 1 is a schematic depiction of a first preferred embodiment of the present invention;

Figure 2 is a flow chart showing steps performed by an auxiliary controller when polling the gaming terminals;

Figure 3 is a flow chart showing steps performed by an primary controller when determining whether or not to award a prize;

Figure 4 is a flow chart showing steps performed by an auxiliary controller once the primary controller has determined that a prize should be awarded; and

Figure 5 is a schematic depiction of a first preferred embodiment of the present invention.

Referring to the drawings, the first preferred embodiment of a gaming apparatus as illustrated in figure 1 includes a primary controller (1) for determining the award of a prize. The primary controller (1) is typically a server, for example a personal computer running a windows advanced server program

and using an SQL database. Such hardware and software is readily commercially available and its use is well known to those skilled in the art.

The logic used by the primary controller (1) to determine whether or not a prize is awarded will vary in different implementations, however in the illustrated preferred embodiment the prize is awarded once an incrementally increased accrued turnover amount tracked by the primary controller 1 has reached or exceeded a randomly selected value. In other embodiments, alternative schemes are used, for example that described in co-pending Australian Provisional Patent Application No. 2003903769, the contents of which are hereby incorporated in their entirety by way of reference.

The auxiliary controller (2) is capable of communication with the primary controller (1) via a wide area network (3). Routers (43 and 44) provide an interface between the wide area network (3) and the primary controller (1) and the auxiliary controllers (2) respectively in a manner which is well known to those skilled in the art. The bandwidth of communications across the wide area network (3) is typically limited, for example in the preferred embodiment the data communications baud rate is 9600 bits per second. The auxiliary controller (2) is also capable of communication with one or more gaming terminals (4) via a local area network (5) having a data communications baud rate of 10 mega bits per second. In the preferred embodiment this LAN (5) is in the form of a serial network, for example an RS-485, or the like. Each of the gaming terminals (4) interfaces with the serial network via interface cards (45) in a known manner. Each of the gaming machines (4) include a display (46) upon which the game is displayed.

The gaming terminals (4) are typically poker machines, however the invention is also applicable to other types of games involving one or more wagers being placed upon an outcome having a finite probability of occurring. Yet other embodiments of the invention are applicable to retail transactions and associated marketing schemes, such as loyalty schemes. For example, a trader may choose to offer a prize once a certain amount of revenue has been received in total sales, or once a given number of a predefined product line has been sold. In such cases, the terminals are typically in the form of personal

computers, point of sale terminals such as electronic cash registers, and the like.

Returning to an exemplary gaming application of a preferred embodiment, a single auxiliary controller (2) is typically disposed at each gaming venue and is connected to the local area network (5) so as to communicate with all of the gaming terminals (4) at that venue. However, it will be appreciated that other embodiments of the invention may utilise more than one auxiliary controller (2) at a given venue, or may utilise a single auxiliary controller (2) to service a number of venues. For ease of reference, the group of gaming terminals (2) to which any given auxiliary controller (2) is connected via the local area network (5) shall be referred to as that auxiliary controller's "associated group" (8). Additionally, the venues at which the auxiliary controllers (2) are disposed (6) are typically geographically separate from each other and from the venue (7) at which the primary controller (1) is disposed. For ease of reference, the venue at which the auxiliary controllers (2) are disposed may be referred to as "remote sites" (6) and the venue at which the primary controller is disposed may be referred to as the "central site" (7), as shown in figure 1. A progressive display (47) is disposed at the gaming venue to display information to the gamers regarding the jackpot prize. Some embodiments of the gaming machines (4) include separate displays, referred to as "tablets", which are also used to display information to the gamers regarding the jackpot prize.

A database server (40) and a workstation (41) are disposed at the central site and are connected to the primary controller (1) via a local area network (42). This local area network (42) may be in the form of an Ethernet making use of category 5 cables, hubs, etc, in a known manner. However other types of LAN's, such as wireless LAN's, and the like, are utilised in alternative embodiments. The database server (42) is utilised by the primary controller (1) for the storage and retrieval of data. The workstation (41) allows an administrator to interface with the apparatus.

Each of the gaming terminals (4) include meters which track various parameters associated with the performance and usage of the gaming terminal (4). In particular, each of the gaming terminals (4) include a meter which tracks the total amount of revenue which has been received by the gaming terminal (4).

This is the main parameter used in the preferred embodiment of this invention, however it will be appreciated that other parameters may also be utilised, for example parameters which track the number of games played, the number or monetary value of prizes awarded, etc. In general, whichever of these parameters is used shall be referred to as an "accumulated amount".

The auxiliary controllers (2) are each responsive to a polling period, which in the preferred embodiment is 1 second. This period is chosen to be large enough to enable an auxiliary controller (2) to receive data from the maximum possible number of gaming terminals (4) which may be in its associated group (8). In one preferred embodiment this maximum possible number is 128, however it will be appreciated that this figure may be higher or lower in other embodiments. Within each polling period, the auxiliary controllers (2) receive data from at least some of the gaming terminals (4), as shown at step 20 of figure 2. The data includes one or more gaming terminal identifiers and associated gaming terminal accumulated amount. In some embodiments each auxiliary controller (2) obtains this data from each of the gaming terminals (4) to which it is connected via the local area network (5). In other words, each auxiliary controller (2) obtains this data from each member of the associated group (8) of gaming terminals (2). Preferably, however, each of the auxiliary terminals (2) only receive data from those gaming terminals in their respective groups (8) for which the accumulated amount has altered since the last polling period. This is advantageous since, in a 1 second polling period, it is likely that only a small sub-set of the associated group (8) of a given auxiliary controller (2) will experience an alteration in their accumulated amount, for example an increase in their revenue amounts.

This data as received by the auxiliary controller (2) within any given polling period is stored a memory accessible to the auxiliary controller (2), as shown at step 21 of figure 2. For the sake of illustrative example, we shall base a running example on the preferred embodiment illustrated in figure 5, wherein the gaming apparatus has five auxiliary controllers (2), identified as Server Nos. 1 to 5. We shall further assume, for the sake of illustrative example, that Server No. 4 (also known at auxiliary controller No. 4) has 25 gaming terminals in its associated group (8), identified by gaming terminal identifier Nos. 1 to 25. In one polling

period auxiliary controller No. 4 receives and stores the following data in its memory:

Gaming Terminal Identifier Nos.	Associated Accumulated Amount
Machine No. 12	$2
Machine No. 20	$5
Machine No. 3	$1

(Table 1)

This data is expressed in the above list, and stored in the memory, in the chronological order in which it was received from the gaming terminals (2). In other words, gaming terminal No. 12 was the first to experience a change in its accumulated amount whereby its revenue increased by $2. This was followed by gaming terminal no. 20 and so on. In other words, the sequence of entries in this list is indicative of the order in which the entries were received by Server No. 4 (2) from the various gaming terminals (4). In some embodiments additional time & date data is also stored in association with the data shown in table 1. All communication of data between the gaming terminals (4) and the auxiliary controllers (2) takes place across the local area network (5) and therefore benefits from its high baud rate as compared to that of the wide area network (3). This contrasts with typical prior art systems in which the gaming terminals communicate directly with the primary controller via the wide area network.

In the running example of the operation of a preferred embodiment, the gaming terminals (4) communicate to their auxiliary controller (2) an accumulated amount which is the amount by which their revenue has altered. However, in other embodiments the gaming machines simply communicate an updated total revenue figure to the auxiliary controller (2), which then subtracts the previous revenue figure for the relevant gaming terminal to calculate the amount by which the revenue has altered.

The next step is for each of the auxiliary controllers (2) to calculate a total accumulated amount, as shown at step 22 of figure 2. In the above example, Server No. 4 would calculate an accumulated total of $8 for the polling period under consideration. This total is then communicated from each of the auxiliary controllers (2) to the primary controller (1) via the wide area network, as shown

at step 23 of figure 2. In the running example, auxiliary controller No. 4 would communicate the following data to the primary controller:

Auxiliary Controller Identifier No.	Total Accumulated Amount in Polling Period
4	$8

(Table 2)

Hence, rather than receive data from each independent gaming terminal (4) as in the prior art, the primary controller (1) only has to receive data from each of the auxiliary controllers (2). This results in an advantageous reduction in the amount of data that must be communicated across the relatively slower wide area network (3) since the number of auxiliary terminals (2) is typically far lower than the number of individual gaming terminals (4).

Referring now to figure 3, once the primary controller (1) has received data from each of the auxiliary controllers (2) at step 24, it then determines whether or not to award a prize at step 25. As mentioned above, this determination may be according to various different rules. However, for the sake of example, we shall proceed on the understanding that the prize is awarded once the total amount of revenue received by all of the gaming terminals (2) exceeds a randomly selected value. For example, assume that the running value of total revenues at tracked by the primary controller (1) is $107,210 prior to processing by the primary controller (1) of the data received from auxiliary controller No. 4. Further, assume that the randomly selected trigger value at which the prize is awarded is $107,214. Once the primary processor (1) increments the running total by the $8 amount communicated by Server No. 4, the running value of total revenues equals $107,218, which exceeds the randomly selected trigger value of $107, 214. Hence, the primary controller (1) determines that the prize is to be awarded to one of the gaming terminals (2) in the group (8) associated with Server No. 4.

If it is determined that no prize is to be awarded, the primary controller (1) returns to step 24 to receive data from another of the auxiliary controllers (2). However, if the primary controller (1) determines that a prize is to be awarded, it communicates "data associated with said determination" to the relevant auxiliary controller (2), as shown at step 26 of figure 3. In one preferred embodiment the

"data associated with said determination" is the portion of the revenue identified by the relevant auxiliary controller (2) that would have been required to increment the running value to the trigger value. In the running example, this portion is $4, since this is the amount that would have been required to increment the running value from $107,210 to the trigger value, $107,214. Hence, in the running example, the primary controller (1) communicates the following data to Server No. 4 via the wide area network (3):

Data Associated with said Determination
$4

(Table 3)

Turning now to figure 4, the "data associated with said determination" is received by Server No 4 at step 27. This data is then analysed by the auxiliary controller (2) in conjunction with the data stored in its memory (that is, the data illustrated in table 1) to determine to which of the gaming terminals (2) the prize is to be allocated, as shown in step 28 of figure 4. In the running example, auxiliary controller No 7 refers to the information previously stored in its memory to determine that if the "data associated with said determination" is between or equal to $0 and $2 (i.e. the $2 identified by gaming terminal No. 12 was the accumulated amount which triggered the jackpot), then gaming terminal No. 12 is the winning terminal (2). If the amount is between or equal to $2.01 and $7 (i.e. the $5 identified by gaming terminal No. 20 was the accumulated amount which triggered the jackpot) then the winning terminal is No. 20. Finally, if the "data associated with said determination" is between or equal to $7.01 and $8 (i.e. the $1 identified by gaming terminal No 3 was the accumulated amount which triggered the jackpot), then the winning terminal is No. 3. In this example the "data associated with said determination" is $4, which is between $2.01 and $7, and therefore the winning terminal is No. 20.

As shown in step 29 of figure 4, the auxiliary controller (2) then communicates a win message to the gaming terminal (4) to which the prize is to be allocated. In the running example, auxiliary controller No. 4 sends a win message to gaming terminal No. 20 via the local area network (5), thereby causing gaming terminal No. 20 to notify the gamer operating that terminal of the win. Additionally, as shown at step 30 of figure 4, the auxiliary controller (2)

communicates a win message to the primary controller (1). This win message includes the gaming terminal identifier of the gaming terminal (2) to which the prize was allocated, which in the running example is gaming terminal identifier No. 20. This enables the primary controller (1) to keep a log of the prizes awarded by the gaming apparatus.

In comparison to at least some prior art systems, the preferred embodiment of the invention advantageously streamlines the amount of processing which must take place at the primary controller (1). Instead, a proportion of the processing takes place at each of the auxiliary controllers (2). The preferred embodiment also substantially reduces the amount of data which must flow between the primary processor (1) and each of the gaming machines (4) as compared to at least some of the prior art systems. This is achieved by making use of the faster communications performance of the LAN (5) as compared to the WAN (3) and also by the implementation of a means by which the auxiliary controller can determine the winning gaming machine (4) upon receipt of the "data associated with the determination". These features help to ensure that the preferred embodiment of the current invention processes the necessary data within the relatively short time available between games, which is typically approximately 2.5 to 3 seconds.

A preferred embodiment of the invention as applied in a retail context has a similar layout to that shown in either figure 1 or figure 5, however with point of sale terminals (4), such as cash registers for example, taking the place of the gaming terminals (4). In one exemplary application of such a preferred embodiment, the merchant may choose to award a prize every time total sales across all of the terminals (4) in the network (hereinafter referred to as the "global sales total") exceed a predefined target amount, say $1,000,000. In each polling cycle, each of the auxiliary controllers (2) obtains data from each of the terminals (4) in its associated group (8). This data includes terminal identifiers and "accumulated amounts" in the form of sales figures. This data is stored by the auxiliary controller (2) in a list that is compiled in the order of receipt of the data from the terminals (4) (and therefore in the same order as the sales took place at the terminals (4)). The sales figures are summed by each the auxiliary controllers (2) such that each of the auxiliary controllers (2)

calculates the total sales that have taken place for its associated group (8) of terminals (2) within the polling period (hereinafter referred to as the "local sales total").

Each of the auxiliary controllers (2) then transmits its local sales total to the primary controller (1) which keeps track of the global sales total and determines whether or not the prize is to be awarded. Once the global sales total exceeds the target amount of $1,000,000, the primary controller (1) determines that a prize should be awarded. The primary controller also determines the portion of money from the local sales total that was required to increment the global sales total over the target amount. For example, if a particular auxiliary controller (2) communicates a local sales total of $10 to the primary controller (1) and this increments the global sales total from $999,993 to $1,000,003, then the portion of money required to increment the global sales total over the target amount was $7.

This figure of $7 is then communicated from the primary controller (1) to the auxiliary controller (2) responsible for triggering the prize. This information is used by the auxiliary controller (2) in conjunction with the previously stored data to determine to which of the terminals (4) the prize is to be awarded.

Another application of this preferred embodiment as used in a retail context is to award a prize once a predefined number of specified products have been sold. For example, a merchant may decide to award a prize to the customer who purchases the 10,000th hamburger. In this embodiment the polling cycle is preferably equal to or less than 1 second. In this way, it is highly unlikely or impossible that more than one customer could be served on any one terminal (4) within any given polling period. Hence, in each polling cycle each of the auxiliary controllers (2) use their respective LANs to poll each of the terminals (4) in their associated group (8) to receive an accumulated amount representative of the number of hamburger sales processed by each of the terminals (4) during the polling cycle. Each of the auxiliary controllers (2) store the data received from the terminals (4) in a list in the order of receipt of that data. This list includes terminal identifiers and individual terminal sales data. For example, in one polling cycle, auxiliary controller no. 2 may store the following data:

Terminal Identifier	Individual Accumulated Amounts (i.e. Number of Hamburger Sales in Polling Period)
Terminal No. 12	3 hamburgers
Terminal No. 3	2 hamburgers
Terminal No. 7	4 hamburgers
Terminal No. 5	1 hamburger

Auxiliary controller no. 2 then calculates the total hamburgers sold by its associated terminals (2) and communicates this data via the WAN to the primary controller (1) as follows:

Total Accumulated Amount
10 hamburgers

The primary controller (1) keeps a running tab of the total number of hamburgers sold across the whole network. For the sake of the example, we shall assume that this global total is, say 9994 prior to the processing of the data from auxiliary controller no. 2. Once the 10 hamburgers communicated by auxiliary controller no. 2 have been added, this global total is 10,004 and therefore the primary controller (1) determines that the prize should be awarded. The primary controller (1) calculates that the number of hamburger sales required to trigger the prize was 6 (i.e. 10,000 – 9994) and this figure becomes the "data associated with the determination" and is communicated to auxiliary controller no. 2 as follows:

Data Associated with said Determination
6 hamburgers

This data is then used by auxiliary controller no. 2, in conjunction with the data in the list stored previously, to determine that it is the customer at terminal no. 7 to whom the prize should be awarded. Although the invention has been described with reference to specific examples, it will be appreciated by those skilled in the art that it may be embodied in many other forms.

DATED this 21st day of October 2003
BALDWIN SHELSTON WATERS
Attorneys for: Paltronics Australasia Pty Limited

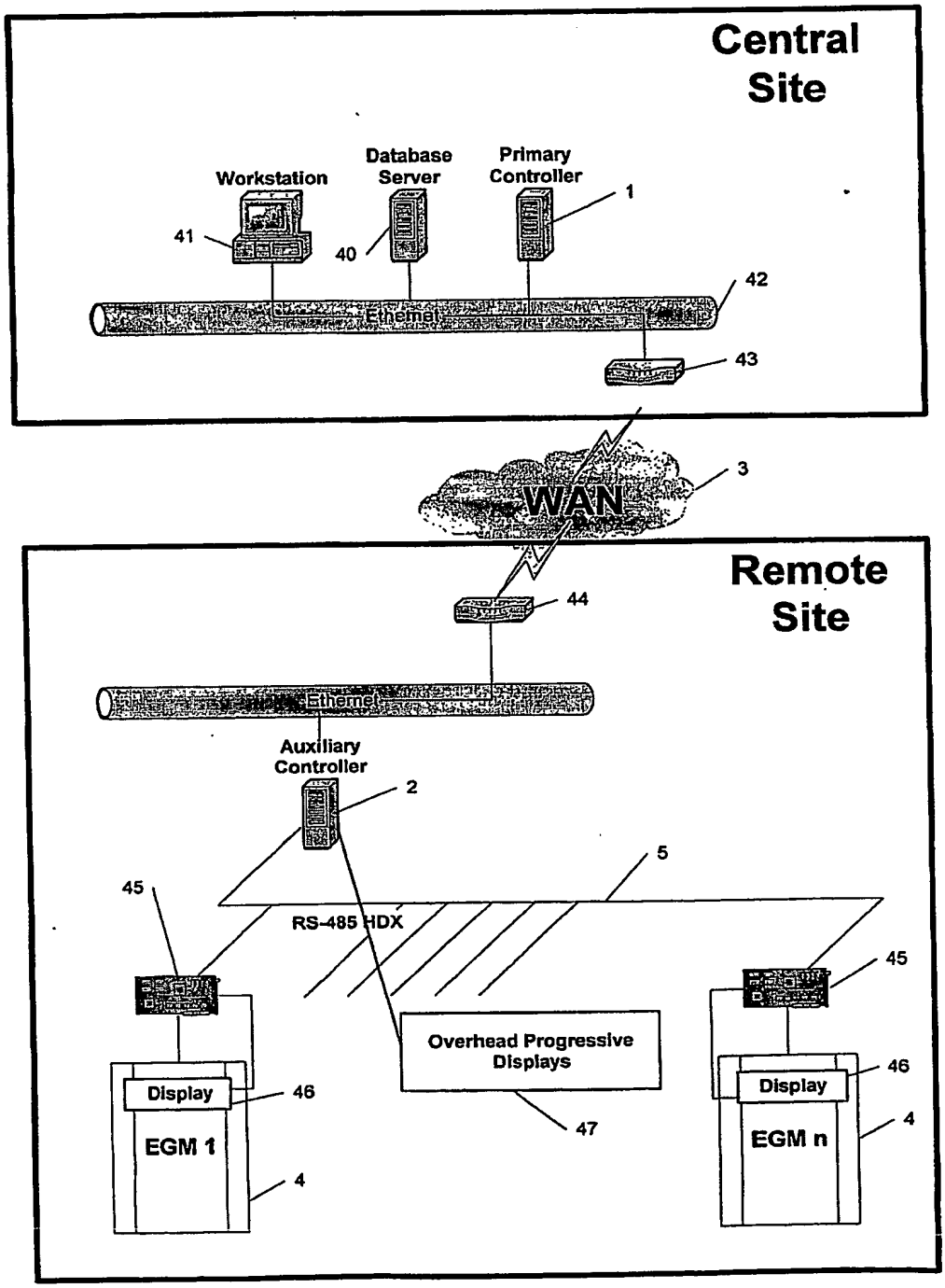
Central Site
Workstation
Database Server
Primary Controller
1
41
40
42
Ethernet
43
3
WAN
Remote Site
44
Ethernet
Auxiliary Controller
2
5
45
RS-485 HDX
45
Overhead Progressive Displays
Display
46
EGM 1
4
47
Display
46
EGM n
4

Figure 1

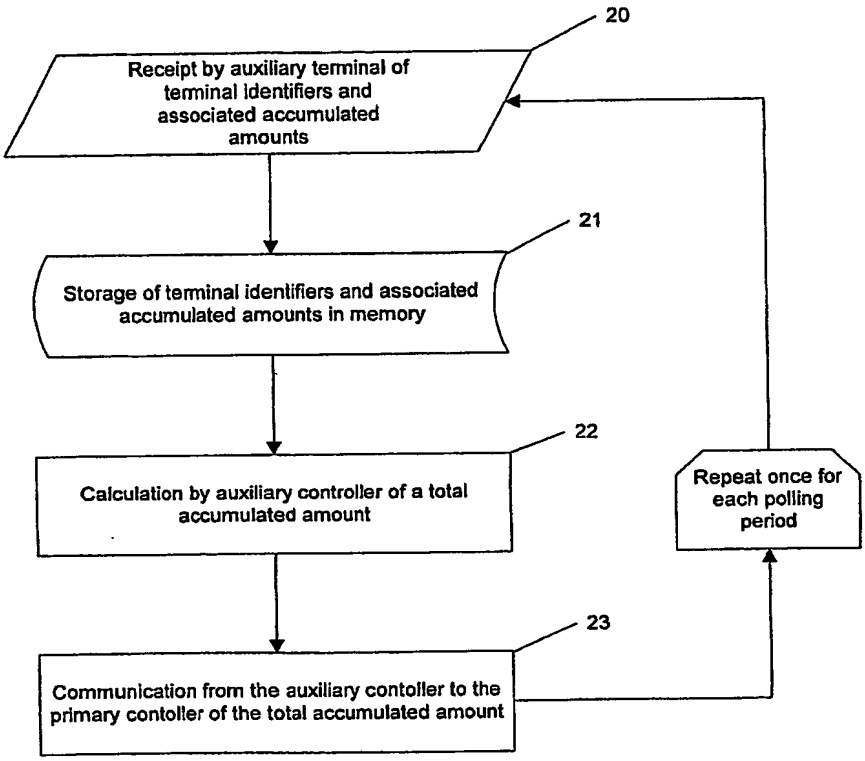
20
Receipt by auxiliary terminal of terminal identifiers and associated accumulated amounts
21
Storage of terminal identifiers and associated accumulated amounts in memory
22
Calculation by auxiliary controller of a total accumulated amount
23
Communication from the auxiliary contoller to the primary contoller of the total accumulated amount
Repeat once for each polling period

Figure 2

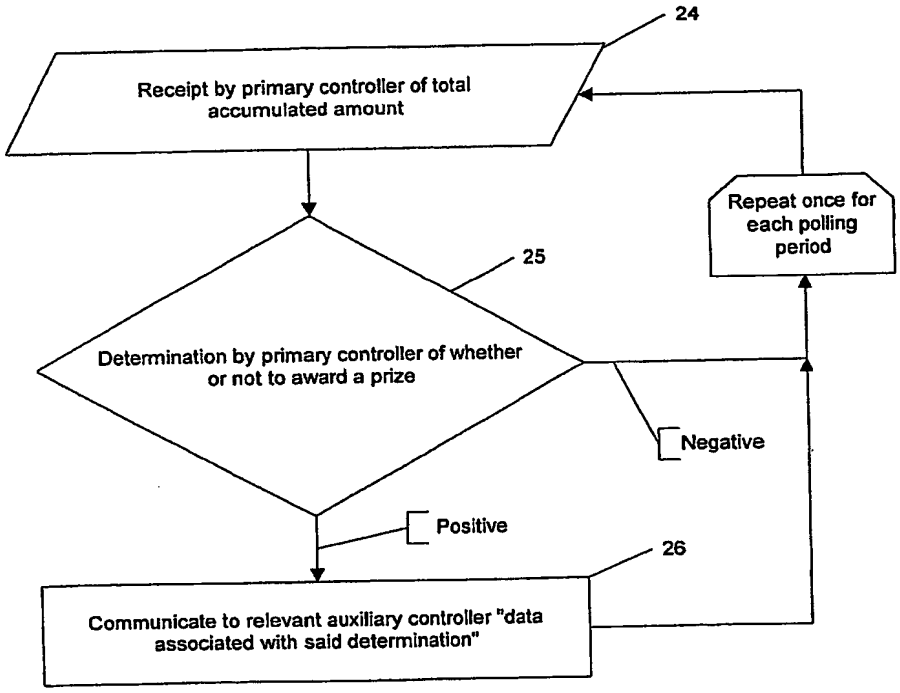
24
Receipt by primary controller of total accumulated amount
Repeat once for each polling period
25
Determination by primary controller of whether or not to award a prize
Negative
Positive
26
Communicate to relevant auxiliary controller "data associated with said determination"

Figure 3

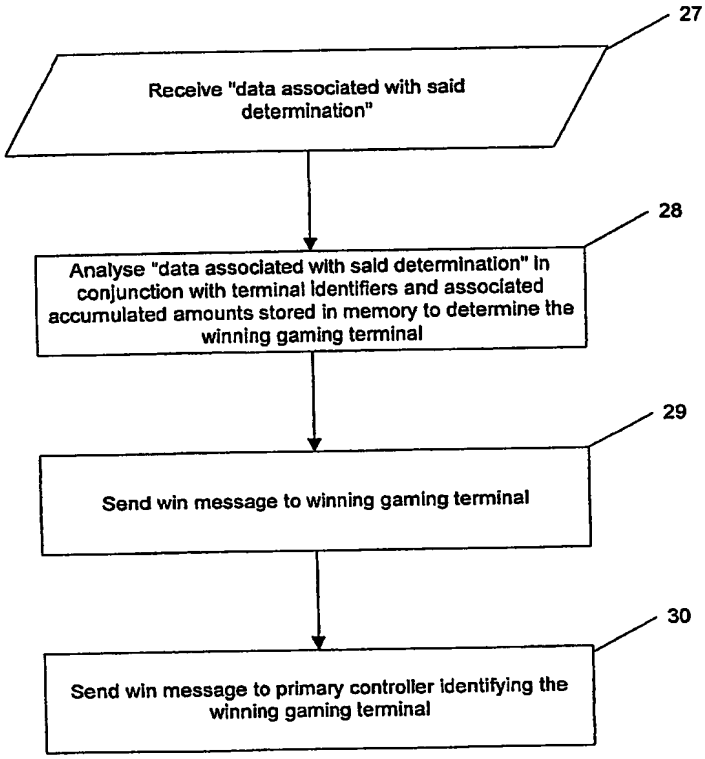
27
Receive "data associated with said determination"
28
Analyse "data associated with said determination" in conjunction with terminal identifiers and associated accumulated amounts stored in memory to determine the winning gaming terminal
29
Send win message to winning gaming terminal
30
Send win message to primary controller identifying the winning gaming terminal

Figure 4

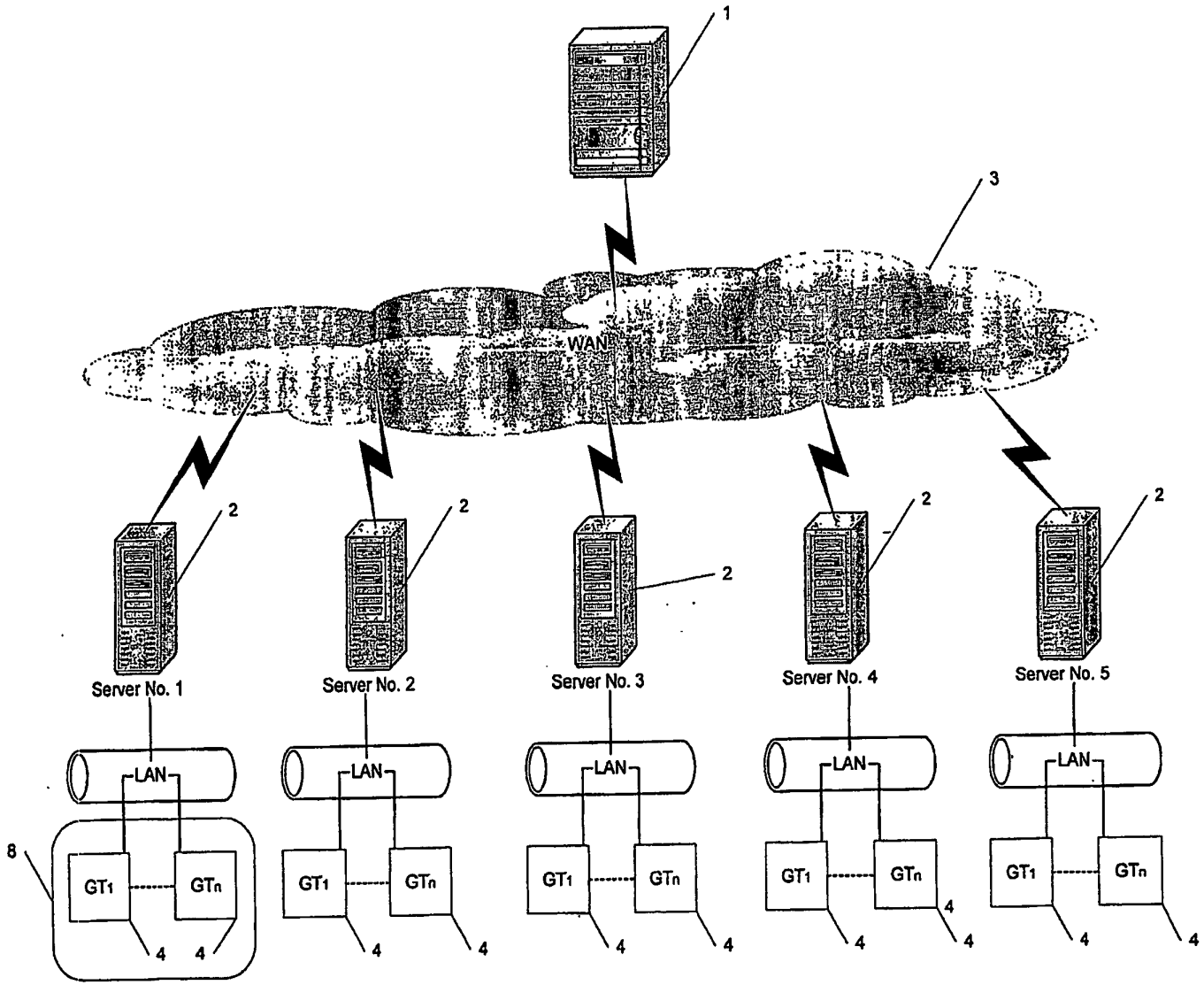
1
3
WAN
2
2
2
2
2
Server No. 1
Server No. 2
Server No. 3
Server No. 4
Server No. 5
LAN
LAN
LAN
LAN
LAN
8
GT1
GTn
4
4

Figure 5

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